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# NOTICE OF ALLOWANCE AND FEE(S) DUE

94140 7590 Merchant & Gould - Cox PO Box 2903 Minneapolis, MN 55402 08/24/2012

EXAMINER

SALTARELLI, DOMINIC D

ART UNIT PAPER NUMBER

2421

DATE MAILED: 08/24/2012

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/396,429	09/15/1999	JOHN S. HENDRICKS	60136.0095USD2	7434

TITLE OF INVENTION: TELEVISION TERMINAL MODEM

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1740	\$0	\$0	\$1740	11/26/2012

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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If the SMALL ENTITY is shown as NO:

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IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

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Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	AT	TORNEY DOCKET NO.	CONFIRMATION NO.	
09/396,429 TITLE OF INVENTION	09/15/1999 i: TELEVISION TERMI	NAL MODEM	JOHN S. HENDRICKS		60136.0095USD2	7434	
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FE	E TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1740	\$0	\$0	\$1740	11/26/2012	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
SALTARELLI	I, DOMINIC D	2421	725-132000				
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A PLEASE NOTE: Unl	ND RESIDENCE DATA less an assignee is ident h in 37 CFR 3.11. Comp	"Indication form ed. Use of a Customer  A TO BE PRINTED ON T	(1) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attor listed, no name will be particular to the particular of the particul	ely, e firm (having as a megent) and the names of neys or agents. If no rorinted.  e) etent. If an assignee issignment.	mber a 2 f up to lame is 3 s identified below, the do	ocument has been filed for	
Please check the appropr	iate assignee category or	categories (will not be pr	cinted on the patent): $\Box$	Individual 🖵 Corpo	ration or other private gro	oup entity Government	
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**	s SMALL ENTITY statu	is. See 37 CFR 1.27.	☐ b. Applicant is no long				
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if requeecords of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than the Office.	ne applicant; a register	ed attorney or agent; or th	e assignee or other party in	
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09/396,429	09/15/1999	JOHN S. HENDRICKS	60136.0095USD2	7434	
94140 75	90 08/24/2012		EXAM	INER	
Merchant & Gould - Cox			SALTARELLI, DOMINIC D		
PO Box 2903 Minneapolis, MN 5	55402		ART UNIT	PAPER NUMBER	
_			2421		

DATE MAILED: 08/24/2012

# **Determination of Patent Term Extension under 35 U.S.C. 154 (b)**

(application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# **Privacy Act Statement**

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)	
	09/396,429	HENDRICKS ET AL.	
Notice of Allowability	Examiner	Art Unit	
	DOMINIC D. SALTARELLI	2421	
The MAILING DATE of this communication appe All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this ap or other appropriate communication GHTS. This application is subject to	plication. If not included not will be mailed in due course. THIS	
1. $\square$ This communication is responsive to <u>the amendment filed 7.</u>	<u>//31/12</u> .		
<ol> <li>An election was made by the applicant in response to a rest the restriction requirement and election have been incorporate</li> </ol>		the interview on;	
3. ☑ The allowed claim(s) is/are 66-79 and 81-85.			
<ul> <li>4. ☐ Acknowledgment is made of a claim for foreign priority unde</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> </ul>	er 35 U.S.C. § 119(a)-(d) or (f).		
<ol> <li>Certified copies of the priority documents have</li> </ol>			
2. Certified copies of the priority documents have	• • • • • • • • • • • • • • • • • • • •		
3. Copies of the certified copies of the priority doc	cuments have been received in this	national stage application from the	
International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:			
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with the requirements	
5. A SUBSTITUTE OATH OR DECLARATION must be submit INFORMAL PATENT APPLICATION (PTO-152) which give			
6. CORRECTED DRAWINGS ( as "replacement sheets") must	t be submitted.		
(a) $\square$ including changes required by the Notice of Draftspers	on's Patent Drawing Review ( PTO-	-948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date			
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in t			
7. DEPOSIT OF and/or INFORMATION about the deposit of B attached Examiner's comment regarding REQUIREMENT FC			
Attachment(s)	5	Ontont Application	
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Dotice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>	<ol> <li>5. ☐ Notice of Informal F</li> <li>6. ☐ Interview Summary</li> </ol>	• •	
	Paper No./Mail Da	te	
<ol> <li>Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date</li> </ol>	7. 🛛 Examiner's Amendr	ment/Comment	
Examiner's Comment Regarding Requirement for Deposit of Biological Material	<u> </u>	ent of Reasons for Allowance	
	9.		
/DOMINIC D SALTARELLI/ Primary Examiner, Art Unit 2421			

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### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 66. A hardware upgrade for a set top terminal for use with a television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus, the hardware upgrade comprising:

an upgrade interface configured for insertion within an expansion card interface slot of a set top terminal for providing access to a set top terminal microprocessor bus coupled to the set top terminal microprocessor and providing data to the set top terminal microprocessor via the set top terminal microprocessor bus;

a communications port to provide communication between the hardware upgrade and a headend; and

a hardware upgrade microprocessor, coupled to the upgrade interface, the hardware upgrade microprocessor configured for communicating directly with the set top terminal microprocessor through the set top terminal microprocessor bus via the upgrade interface;

wherein the hardware upgrade microprocessor provides enhanced functions to the set top terminal microprocessor through communication with the set top terminal microprocessor using the upgrade interface coupled to the set top terminal microprocessor bus according to receive interactive input received from a subscriber, generate responses based on the received interactive input and fer provide the generated responses to the microprocessor of the set top terminal, the hardware upgrade microprocessor configured to communicate directly with a headend via the communications port to receive upgrade data to provide the enhanced functions to the set top microprocessor in response to the interactive input received form from the subscriber.

Claim 73. A set top terminal for use with a television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:

- a receiver adapted to receive programs; and
- a first hardware upgrade comprising:
- a communications port to provide communication between the hardware upgrade and a headend;

an upgrade interface configured for insertion within an expansion card interface slot of a set top terminal for providing access to a set top terminal microprocessor bus coupled to the set top terminal microprocessor and providing data to the set top terminal microprocessor via the set top terminal microprocessor bus; and

a hardware upgrade microprocessor, coupled to the upgrade interface, the hardware upgrade microprocessor configured for communicating directly with the set

top terminal microprocessor through the set top terminal microprocessor bus via the upgrade interface;

wherein the hardware upgrade microprocessor provides enhanced functions to the set top terminal microprocessor through communication with the set top terminal microprocessor using the upgrade interface coupled to the set top terminal microprocessor bus according to interactive input received from a subscriber, generate responses based on the received interactive input and for provide the generated responses to the microprocessor of the set top terminal, the hardware upgrade microprocessor configured to communicate directly with a headend via the communications port to receive upgrade data to provide the enhanced functions to the set top microprocessor in response to the interactive input received form from the subscriber.

## Claim 83. A system comprising:

a television program delivery system adapted to deliver television program signals; and

a set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:

- a receiver adapted to receive at least some of the television program signals; and a hardware upgrade comprising:
- a hardware communications port to provide communication between the hardware upgrade and a headend;

an upgrade interface configured for insertion within an expansion card interface slot of a set top terminal for providing access to a set top terminal microprocessor bus coupled to the set top terminal microprocessor and providing data to the set top terminal microprocessor via the set top terminal microprocessor bus; and

Page 5

a hardware upgrade microprocessor, coupled to the upgrade interface, the hardware upgrade microprocessor configured for communicating directly with the set top terminal microprocessor through the set top terminal microprocessor bus via the upgrade interface;

wherein the hardware upgrade microprocessor provides enhanced functions to the set top terminal microprocessor through communication with the set top terminal microprocessor using the upgrade interface coupled to the set top terminal microprocessor bus according to interactive input received from a subscriber, generate responses based on the received interactive input and fer provide the generated responses to the microprocessor of the set top terminal, the hardware upgrade microprocessor configured to communicate directly with a headend via the hardware communications port to receive upgrade data to provide the enhanced functions to the set top microprocessor in response to the interactive input received form from the subscriber.

Claim 85. A method for delivering television programs through a television program delivery system with menu selection of programs, comprising:

receiving subscriber input at a hardware upgrade card from a set top terminal;

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providing a communications port to provide communication between the hardware upgrade and a headend;

providing an upgrade interface to the hardware upgrade card, the upgrade interface being configured for insertion within an expansion card interface slot of the set top terminal for providing access to a set top terminal microprocessor bus coupled to the set top terminal microprocessor and providing data to the set top terminal microprocessor via the set top terminal microprocessor bus; and

providing a hardware upgrade microprocessor, coupled to the upgrade interface, the hardware upgrade microprocessor configured for communicating directly with the set top terminal microprocessor through the set top terminal microprocessor bus via the upgrade interface,

wherein the hardware upgrade microprocessor provides enhanced functions to the set top terminal microprocessor through communication with the set top terminal microprocessor using the upgrade interface coupled to the set top terminal microprocessor bus according to interactive input received from a subscriber, generate responses based on the received interactive input and for provide the generated responses to the microprocessor of the set top terminal, the hardware upgrade microprocessor configured to communicate directly with a headend via the communications port to receive upgrade data to provide the enhanced functions to the set top microprocessor in response to the interactive input received form from the subscriber.

2. The following is an examiner's statement of reasons for allowance: Prior art antedating applicant's effective filing date of December 9, 1992 has been exhausted, as there is no prior art which the examiner is aware of that teaches or render obvious the claimed limitations of a hardware upgrade card for set top terminal possessing both a communications port for direct communication with a head end and the processing of user input for enhanced functions as currently claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOMINIC D. SALTARELLI whose telephone number is (571)272-7302. The examiner can normally be reached on Monday - Friday 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOMINIC D SALTARELLI/
Primary Examiner, Art Unit 2421